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DISCOVERY MINES

L I M I T E D

ANNUAL
REPORT

1965

HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31st, 1965

DISCOVERY MINE, N.W.T.

March
24, 1966

OPERATING SUMMARY

	1965	1964
Proven Ore Reserves — Tons	190,540	174,756
Grade Ounces per Ton	0.82	0.84
Average Tons Milled Daily	221	213
Ounces Gold Produced	55,865	47,471
Revenue	\$2,183,617	\$1,988,585
Operating Profit (before depreciation)	\$ 676,051	\$ 568,170

FINANCIAL SUMMARY 1950 - 1965

Ounces Gold Produced	878,231
Bullion Production	\$30,914,750
Net Profit	\$ 7,420,218
Dividends Paid	\$ 5,358,643

DISCOVERY MINES LIMITED

EXECUTIVE OFFICE

Suite 1011, 2200 Yonge Street, Toronto

OFFICERS AND DIRECTORS

OFFICERS

J. J. BYRNE	-	-	-	-	-	-	-	Chairman of the Board
J. C. BYRNE	-	-	-	-	-	-	-	President
D. S. HAMILTON	-	-	-	-	-	-	-	Secretary-Treasurer

DIRECTORS

J. J. BYRNE	-	-	-	-	-	-	-	Toronto, Ont.
J. C. BYRNE	-	-	-	-	-	-	-	Toronto, Ont.
W. M. CONNOR	-	-	-	-	-	-	-	Ottawa, Ont.
E. S. HOLMGREN	-	-	-	-	-	-	-	Detroit, Mich.
D. O. MUNGOVAN, Q.C.	-	-	-	-	-	-	-	Toronto, Ont.

MANAGEMENT

J. C. BYRNE	-	-	-	-	-	-	-	Toronto, Ont.
								Managing Director
R. J. KILGOUR, P.Eng.	-	-	-	-	-	-	-	Discovery, N.W.T.
								General Manager
C. H. MACDONALD, P.Eng.	-	-	-	-	-	-	-	Carmacks, Y.T.
								Mine Manager

CONSULTANTS

NORMAN W. BYRNE, P.Eng.	-	-	-	-	-	-	-	Yellowknife, N.W.T.
								Consulting Engineer
A. P. BEAVAN, Ph.D., P.Eng.	-	-	-	-	-	-	-	Montreal, Que.
								Consulting Geologist

SOLICITORS

MUNGOVAN & MUNGOVAN	-	-	-	-	-	-	-	80 King St. W., Toronto, Ont.
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AUDITORS

EDDIS & ASSOCIATES	-	-	-	-	-	-	-	85 Richmond St. W., Toronto, Ont.
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TRANSFER AGENTS AND REGISTRARS

CROWN TRUST COMPANY	-	-	-	-	-	-	-	302 Bay St., Toronto, Ont.
BANKERS TRUST COMPANY	-	-	-	-	-	-	-	New York, N.Y.

BANKERS

ROYAL BANK OF CANADA	-	-	-	-	-	-	-	Toronto, Ont.
								Bay & Temperance Branch
CANADIAN IMPERIAL BANK OF	-	-	-	-	-	-	-	Yellowknife, N.W.T.
COMMERCE	-	-	-	-	-	-	-	Whitehorse, Y.T.

DIRECTORS' REPORT

Your Company's Discovery Mine in the Northwest Territories enjoyed a successful year in 1965. Increases were recorded in grade of ore milled, in tons milled, in bullion production and in operating profit. New ore developed during the year more than replaced the 80,540 tons of ore milled, and by year end proven ore reserves were increased to 190,540 tons averaging 0.82 ounces, \$31.05 per ton at the average Mint price for the past three years.

Operations at the Company's LaForma Mine in the Yukon Territory were disappointing. The grade of ore that can be mined combined with a very substantial increase in labour costs in the Yukon place the operation well below economic limits. Shareholders have been advised that operations were suspended in February 1966. Since we will not proceed with the installation of a cyanide milling plant and auxiliary services, all preproduction expenditures for 1965 at the LaForma Mine have been written off against profits from the Discovery Operation which reduced the Company's net profit.

We have a most important asset in our shareholdings of 40 per cent of the issued capital of Rayrock Mines Limited. Rayrock has substantial interests in oil, gold, silver, lead and zinc production and is active in exploring and developing mineral properties across Canada. A resume of Rayrock's activities and holdings appears on Page 19.

A development of interest to your Company is a copper-zinc-silver deposit in the Mattagami area, Quebec, where Radiore Uranium Mines (80 per cent) and Discovery Mines (20 per cent) are continuing extensive diamond drilling. The drill indicated orebody occurs on the Radiore-Discovery property and on the optioned Amagami Mines' property to the east. Consideration is being given to sinking a shaft to develop and mine the ore for shipment to one of the mills in the immediate area.

DIRECTORS' REPORT (continued)

Discovery holds a 29 per cent share interest and Income Debentures of \$440,000 in Tundra Gold Mines Limited which is in its second year of production. The operation is a pioneering effort some 200 miles south of the Arctic Circle. Profit after debenture interest of \$52,875 and before depreciation for the first nine months, April to December of the current fiscal year, was \$242,029 at a milling rate of 145 tons daily.

At year end market value of listed investments in other companies had increased by \$209,000. In addition, the Company received \$186,849 from the sale of investments during the year.

We look forward to another successful year for the parent mine at Discovery, Northwest Territories. Interim dividend No. 23 will be paid to Shareholders in December of this year.

We extend our sincere thanks and appreciation to management, staff and crews for their loyal and devoted service.

On behalf of the Board

J. J. BYRNE
Chairman of the Board

J. C. BYRNE
President and Managing Director

Toronto, Ontario
March 4, 1966



Discovery Plant and Townsites: In the foreground are employee residences with skating rink, curling rink and recreation hall to the left. In the central section are headframe, mill and plant buildings, with staff residences in the background overlooking Giaugue Lake.



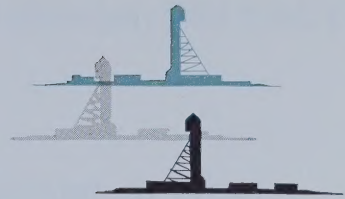
Discovery Staff: Back Row, Left to Right: W. H. Kruining, R. M. Kleine, L. F. Borden, M. V. Taylor, M. J. Skopos, R. D. Falloon, A. R. Mills. Front Row: D. P. Sponton, J. W. Garner, E. G. Marett, R. F. Stedman, R. J. Kilgour, H. Werner, J. A. Caswell, H. J. Schroeder.

DISCOVERY MINES LIMITED

BALANCE SHEET AS AT DECEMBER 31, 1965

ASSETS

	1965	1964
Current		
Cash	30,981	210,808
Short-term investment certificate		100,000
Bullion on hand and in transit	180,903	154,283
Receivable under the Emergency Gold Mining Assistance Act — estimated	31,446	90,445
Accounts receivable	29,364	26,227
	<u>272,694</u>	<u>581,763</u>
Shares in Other Mining Companies, at cost		
Listed (Quoted market value 1965 — \$2,224,680, 1964 \$2,015,419)	1,816,220	2,003,069
Other	941,411	941,411
	<u>2,757,631</u>	<u>2,944,480</u>
Investment in and Advances to Subsidiary Company, Camlaren Mines Limited		
Investment in shares, at cost	252,058	228,309
Advances	13,190	7,486
	<u>265,248</u>	<u>235,795</u>
Other Investments		
Income debentures of Tundra Gold Mines Limited, due April 1, 1970	440,000	440,000
	<u>440,000</u>	<u>440,000</u>
Mining Properties		
Mining claims — acquired for cash and shares of capital stock at valuation placed thereon by the directors of the company	272,932	273,682
Land, buildings, plant and equipment, at cost less accumulated depreciation to date 1965 — \$2,330,375, 1964 — \$2,256,627	1,037,165	427,970
Deferred exploration and development expenditures	597,178	597,178
	<u>1,907,275</u>	<u>1,298,830</u>
Other		
Mine stores, at cost	247,775	228,466
Prepaid expenses and sundry deposits	7,954	11,127
Incorporation expense	4,837	4,837
	<u>260,566</u>	<u>244,430</u>
	<u>\$5,903,414</u>	<u>\$5,745,298</u>



LIABILITIES

Current

	1965	1964
Bank loan and overdraft	300,540	
Accounts payable and accrued charges	174,935	203,460
Estimated income taxes payable	20,000	42,662
	<u>495,475</u>	<u>246,122</u>

Capital and Surplus

Capital stock

Authorized:

4,000,000 shares of \$1 par value each \$4,000,000

Issued and fully paid

2,734,773 shares (12,000 shares issued during 1965 for cash) 2,734,773 2,722,773

Contributed surplus (\$4,800 received upon issue of shares during 1965) 189,324 184,524

Earned surplus 2,483,842 2,591,879

5,407,939 5,499,176

Approved on behalf of the Board,

J. J. BYRNE, Director.

J. C. BYRNE, Director.

\$5,903,414

\$5,745,298

The accompanying Notes are an integral part of these Financial Statements and should be read in conjunction therewith.

DISCOVERY MINES LIMITED

NOTES TO FINANCIAL STATEMENTS AS AT DECEMBER 31, 1965

1. Subsidiary Company

During 1965 the company acquired an additional 6½% interest in Camlaren Mines Limited bringing its holdings to 70% of the outstanding capital of that company.

By agreements dated November 30, 1964 and October 15, 1965 the company agreed to carry out, by December 31, 1968, a programme of exploration and development upon the 21 mining claims held by Camlaren Mines Limited in the Gordon Lake Area, N.W.T. at a total cost of \$317,000. In consideration of the company carrying out the said programme, Camlaren Mines Limited agreed to assign to the company a 66%% undivided interest in the said mining claims.

The accounts of the subsidiary company have not been consolidated in these financial statements. During the period covered by the financial statements, Camlaren Mines, Limited was inactive except for maintenance expenses at its property in the Gordon Lake Area, N.W.T.

2. Income Debentures of Tundra Gold Mines Limited

The income debentures of Tundra Gold Mines Limited have been subordinated to the bank to assist in the financing of that company. As at the date of these financial statements, Tundra Gold Mines Limited was not indebted to its bankers.

3. Depreciation — LaForma Mine, Yukon Territory

Since the mine did not achieve the planned production rate in 1965, the company has not recorded any depreciation with respect to its buildings, plant and equipment at the LaForma mine in the Yukon Territory.

Depreciation on the LaForma fixed assets calculated at the 30% rate allowed for income tax purposes would amount to \$135,043 for the period from commencement of milling to the end of the year.

4. Comparative Figures

In the Statement of Operations, the comparative figures for the year 1964 include the operations of a predecessor company, Consolidated Discovery Yellowknife Mines Limited, for the period from January 1, 1964 to March 5, 1964, the date of amalgamation.

5. Deferred Exploration and Development Expenditures

Deferred exploration and development expenditures of \$597,178 consist of expenditures by a predecessor company upon (a) the LaForma property, Yukon Territory of \$145,814 and (b) upon other properties of \$451,364.

It is the policy of the company to carry these expenditures forward until such time as they can be written off against revenue from these properties.

STATEMENT OF OPERATIONS

For the year ended December 31, 1965

	1965	1964
Revenue		
Metal production	2,115,617	1,798,856
Investment income		22,729
Estimated amount recoverable under the Emergency Gold Mining Assistance Act	68,000	167,000
	<u>2,183,617</u>	<u>1,988,585</u>
Expenditure		
Cost of metal production, including mining, milling, delivery and mint charges	1,246,194	1,116,128
Exploration and development	199,955	230,729
Head office, administrative and general expenses	56,917	69,058
Directors' fees	4,500	4,500
	<u>1,507,566</u>	<u>1,420,415</u>
Profit before depreciation	676,051	568,170
Deduct:		
Depreciation on buildings, plant and equipment	73,747	47,856
Operating profit	<u>602,304</u>	<u>520,314</u>
Deduct:		
Exploration, development and mining at LaForma, Yukon Territory, less revenue from production	478,145	328,312
Outside exploration	22,029	25,726
	<u>500,174</u>	<u>354,038</u>
Net profit before income taxes	<u>102,130</u>	<u>166,276</u>
Less:		
Estimated Federal and Provincial income taxes		1,564
Estimated Northwest Territories royalty tax	20,000	18,000
	<u>20,000</u>	<u>19,564</u>
Net profit for the year	<u>\$ 82,130</u>	<u>\$ 146,712</u>

DISCOVERY MINES LIMITED

STATEMENT OF EARNED SURPLUS

For the year ended December 31, 1965

Balance — January 1, 1965	2,591,879
Add:	
Net profit for the year	82,130
	<u>2,674,009</u>
Deduct:	
Dividend paid	164,086
Adjustment of Emergency Gold Mining Assistance for prior years	15,466
Adjustment of prior years' income taxes	10,615
	<u>190,167</u>
Balance — December 31, 1965	<u>\$2,483,842</u>

AUDITORS' REPORT

To the Shareholders,
Discovery Mines Limited.

We have examined the Balance Sheet of Discovery Mines Limited as at December 31, 1965 and the Statements of Earned Surplus and Operations for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

We report that, in our opinion, the attached Balance Sheet and accompanying Statements of Earned Surplus and Operations present fairly the financial position of the company as at December 31, 1965 and the results of its operations for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Our examination also included the accompanying Statement of Source and Application of Funds which, in our opinion, presents fairly the sources and application of funds of the company for the year ended December 31, 1965.

Toronto, Canada,
March 8, 1966.

EDDIS & ASSOCIATES,
Chartered Accountants.

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

For the year ended December 31, 1965

Source of Funds:

Net profit for the year after adding back \$73,747 depreciation not requiring a disbursement of funds this year	155,876	
Sale of capital stock	16,800	
Sale of investments	186,849	
Reduction in sundry deposits	3,173	362,698

Application of Funds:

Dividend paid	164,086	
Additions to fixed assets	682,193	
Purchase of shares of subsidiary company, Camlaren Mines Limited	23,749	
Advances to subsidiary company, Camlaren Mines Limited	5,704	
Increase in mine stores	19,309	
Additional income taxes paid on reassessment of prior years' income	10,614	
Reduction of company's claim for Emergency Gold Mining Assistance for prior years	15,465	921,120
Net funds applied		<u>\$ 558,422</u>
Net current assets — January 1, 1965	335,641	
Net current liabilities — December 31, 1965	222,781	
		<u>\$ 558,422</u>

DISCOVERY MINES LIMITED

PRODUCTION RECORD FOR THE YEARS 1950 TO 1965

	Tons Milled	Average Tons Per Day	Grade Ounces Per Ton	Total Ounces Produced	Total Value
1950	29,995	82	.63	18,031	\$ 685,680
1951	31,915	87	.68	20,948	772,191
1952	33,282	91	1.12	36,292	1,245,163
1953	33,121	91	1.15	36,919	1,274,008
1954	37,389	102	1.54	56,370	1,922,849
1955	38,693	106	1.76	66,742	2,312,347
1956	42,000	115	1.71	70,685	2,432,972
1957	51,273	140	1.60	81,213	2,736,907
1958	47,621	130	1.78	84,051	2,863,025
1959	51,708	142	1.64	83,988	2,844,374
1960	51,776	142	1.60	81,967	2,835,701
1961	55,163	151	1.18	64,469	2,304,929
1962	53,858	148	.81	43,011	1,617,543
* 1963	47,924	168	.64	30,209	1,143,999
1964	77,830	213	.62	47,471	1,798,856
1965	80,546	221	.71	55,865	2,115,617
TOTAL	764,094	132	1.16	878,231	\$30,906,161

* In addition to the above, Discovery milled during 1963 12,174 tons of Camlaren Mines Limited ore grading 1.14 ounces per ton.

OPERATIONS REPORT

DISCOVERY MINE, Northwest Territories

1965 was another successful year for the parent mine at Discovery, N.W.T. The mill treated 80,540 tons of ore grading 0.71 ounces of gold per ton. This is a new record for tonnage milled, exceeding the previous year by 4 per cent, and grade of ore milled increased by 14 per cent. Further improvements are expected during 1966.

Norman W. Byrne, the Company's Consulting Engineer, summarizes mine development and ore reserves in his year end report as follows:

"Development of the 4 Vein system and the 16 Vein occupied the full attention of development crews during 1965 with the exception of some minor work on upper levels. Exploration and development ranged over a vertical extent of 1,600 feet to the 3,650 foot level in the mine. Rehabilitation of two deep levels, the 26th and 27th, at 3,800 and 3,950 feet, will institute a return to exploration at these horizons where the No. 1 Vein had earlier signaled an end to depth development. The 4 Vein and 16 Vein are gradually converging longitudinally and if the trend continues to the deepest mine level, the 27th, a continuous ore structure may be mined at that horizon.

"Drifting and raising, now almost complete in the 4 Vein above the 25th level, have outlined an ore block having a tonnage potential in excess of 200,000 tons of which less than half have been broken. The first 40,000 tons hoisted from this vein in 1965 grading 1.04 ounces came from selective mining on the 18th, 19th and 21st levels. On the 20th level, where the 4 Vein was first encountered, parallel and sub-parallel structures dictate, due to complex cross-veining, increased mining widths with consequent slightly lower grade. Flat drilling from stopes and raises on levels above and below the 20th could result in a beefed-up reserve in the 4 Vein grading about 0.83 ounces per ton. Raising on 4 Vein above the 15th level has approximately joined up with workings of an earlier vintage on this structure.

"The 16 Vein is smaller structurally than the 4 Vein and whereas it supplied intermittent tonnages and variable grade in earlier years, lower level development on this vein in 1965 produced some surprisingly consistent high grade ore, especially at the 22nd and 23rd levels where grades exceeded one ounce gold per ton over 7 foot widths. Again, the 33,000 tons broken in this structure at present working levels is less than half the indicated potential.

OPERATIONS REPORT (continued)

"Diamond drilling below the present 25th level on the 4 Vein and 16 Vein continues to show promise but ore lengths are noticeably shorter. Routine exploratory drilling of the favourable competent greywacke bed shows narrowing at the lower horizons where ore is confined to a single quartz vein. The complex vertical folding which produced multiple veining within the greywacke above and below the 20th level is not evident but parallel duplication of the narrower bedding has produced a series of short quartz lenses west of present development which may provide limited ore sources after detailing. Other occurrences of the favourable competent greywacke are being investigated at shallower horizons.

"The West Zone ore at upper levels, broken at low cost in wide stopes, continues to supply some mill feed but no new ore will be broken here in 1966. The 4 Vein will again provide about 60 per cent of mill feed, the 16 Vein and West Zone the remainder. Proven ore reserves in the mine at year end may be summarized as follows:

	Tons		Grade	
	1965	1964	1965	1964
Broken in Stopes ..	60,523	43,355	0.83	0.41
In Place	130,017	141,401	0.81	0.98
Totals	190,540	174,756	0.82	0.84

"No new major sources of ore is evident but exploration of the favourable greywacke will continue throughout the mine and drill probing below the 4,000 foot horizon will be pursued. Detailing of the 4 Vein and 16 Vein ore blocks will be expanded throughout 1966 and this work is expected to enlarge the known potential as was the experience in the year just ended."

In his year end report, R. J. Kilgour, General Manager, records production of 55,865 ounces of gold valued at \$2,115,952 from the milling of 80,546 tons of ore with a value of \$26.27 per ton.

Overall operating costs increased by 5 per cent to \$17.79 per ton milled but decreased by 8 per cent to \$25.66 per ounce of gold produced; operating profit increased by 19 per cent over 1964 to \$676,051.

Fifty-five per cent of the ore hoisted during the year came from the 4 Vein system, 29 per cent from 16 Vein and most of the balance from the West Zone. Ore is now mined exclusively by shrinkage methods with the build up of an additional 17,200 tons of broken ore reserves to 60,523 tons. During the year mining costs increased by 18 per cent to \$10.65 per ton milled due in some degree to the breaking of this addi-

tional ore, but due mainly to increased labour costs.

With construction booming, the oil industry flourishing and new base metal mines coming into production, the entire economy in Western Canada is expanding at an accelerated pace. Wage rates have spiralled upwards and skilled labour is at a premium. This brought about a shortage of experienced men at Discovery. A program of on the job training was undertaken by department heads and was particularly successful underground where "School Stopes" are operated to teach men the various aspects of mining, including safety. The employment of women at the mine, where feasible, has proven satisfactory and is increasing.

Two family dwellings were added during 1965 for a total of 35. A new metal-frame office-warehouse was completed during the year to house general offices, engineering and geology department, safety and personnel offices and mine stores. The former office is being converted into housing and will include women's staff quarters.

All community facilities were used to good advantage during the year. Air service to and

from the mine operates on a year round basis. The bulk of equipment and supplies for the year was trucked to the mine over a 65-mile winter route from Yellowknife.

OPERATING COSTS

	1965		1964	
	Per Ton Milled	Per Ounce Recovered	Per Ton Milled	Per Ounce Recovered
Development	\$ 3.38	\$ 4.87	\$ 4.01	\$ 6.58
Mining	10.65	15.36	9.07	14.87
Milling	3.76	5.43	3.88	6.36
Total Operating Costs before depreciation & taxes	<u>\$ 17.79</u>	<u>\$ 25.66</u>	<u>\$ 16.96</u>	<u>\$ 27.81</u>

DEVELOPMENT

	1965	1964	To Date
Shaft Sinking	nil	nil	4,060 ft.
Shaft Stations and Loading Pockets	nil	nil	161,181 cu. ft.
Sumps	nil	nil	31,838 cu. ft.
Raises and Ore Passes	559	385	18,379 ft.
Drifts and Crosscuts (Including Slash)	3,290	5,823	44,997 ft.
Diamond Drilling — Surface	nil	nil	25,404 ft.
Diamond Drilling — Underground	21,383	10,015	219,373 ft.

MILLING

	1965	1964	To Date
Tons Milled	80,540	77,830	764,088
Tons Milled Daily	220.6	212.6	132.5
Operating Time — per cent	97.99	99.03	97.75
Mill Heads — Ounces per ton	0.71	0.62	1.16
Mill Tails — Ounces per ton	0.014	0.012	0.020
Mill Recovery — per cent	98.04	98.02	98.29
Mill Heads — Value per ton	26.80	23.11	41.16
Mill Tails — Value per ton	0.53	0.46	0.70

OPERATIONS REPORT (continued)

LaFORMA MINE, Yukon Territory

Operations at the LaForma Mine were suspended at the end of February 1966. We experienced far more than the usual number of problems and setbacks in attempting to bring a gold mine into production prematurely in the far north. The grade of ore that can be mined combined with spiralling labour costs in the Yukon and a fixed price for our product places the LaForma operation well below economic limits. A new lone gold mine cannot compete in an area where labour is in short supply and base metals, tungsten and asbestos are produced at current favourable market prices.

The decision in March 1965 to install an amalgamation-flotation mill was dictated by the Federal Government's announcement that new gold mines in new areas must be in production by June 1965 to qualify for Cost Aid. A gold mine, particularly one located in far northern Canada, must have some assistance in the early production years. The June date was premature by six to twelve months, as we required that length of time to properly develop and prepare the deposit for mining. We did not have sufficient knowledge of the ore occurrence to warrant the cost of constructing a cyanide plant and auxiliary services,

nor was there time. Amalgamation-flotation equipment was installed to get under the wire and a cyanide plant addition was planned for early this year.

The amalgamation-flotation equipment presented serious recovery problems and was not able to treat more than an average of 35 tons daily on account of the fine state in which the gold occurs and a limited temporary water supply from mine workings. A cyanide plant, due to recirculation of water, could treat 100 tons daily with the same quantity of water and recovery of 96-97 per cent of the fine gold could readily be obtained. C. H. Macdonald, Mine Manager, states in his year end report:

"During the first six weeks mill operation was plagued by many difficulties — feeder and jig operation, poor grind and uncertain water supply. This was reflected in very poor recovery until the end of July. At that time total recovery was 37.9 per cent with amalgamation yielding 18.4 per cent and flotation 19.5 per cent.

"From August onward more constant feed and water supply, better jig operation and flotation technique improved the overall recovery to 63

per cent — amalgamation being 28.5 per cent and flotation 34.5 per cent.

"The flotation operation has produced results in keeping with the figures obtained in the ore testing by the Department of Mines; amalgamation recovery, however, is far below the indicated recovery of 50 per cent to 60 per cent of contained gold."

During the six months that the mill operated, mill feed was to a large extent from development headings and necessarily included an excessive amount of dilution. Mill tailings averaged 0.10 ounces per ton from 0.32 ounces per ton mill feed. Unfortunately any period of mill feed appreciably above this average grade resulted in substantially higher tailings losses.

A series of raises at 100 and 200 foot centres combined with trial stoping in several sections revealed that ore occurrences within the quartz bodies are less continuous in the vertical range than previous development work had shown. This condition, plus the heavy ground requiring constant timber support, has contributed to excessive dilution of the grade of ore that can be mined which is approximately 25 per cent lower than previous ore reserve estimates.

The erratic nature of the deposit was illustrated in the month of February 1966. During the first half of the month all five working places were in low grade material averaging 0.20 ounces per ton. The last half of the month these same five workings produced medium to very high grade ore. In the South Zone No. 304 subdrift was in high grade ore averaging 2.00 ounces per ton; ore from 306 stope averaged 0.64 ounces per ton and 405 raise averaged 0.28 ounces over 5 feet. In the North Zone ore drawn from 411 stope averaged 0.56 ounces per ton and 413 raise was in very high grade ore for the last 18 feet averaging 7.20 ounces per ton over 2.5 feet. Experience has shown that these values cannot be expected to persist for any appreciable vertical extent and they in no way affect the decision to suspend operations.

CAMLAREN MINE, Northwest Territories (Subsidiary Company)

A 70 per cent interest is held by your Company in the Camlaren gold property located 28 air miles or 40 winter road miles west and south of the Discovery Mine. In the 1930's a shaft was sunk to a depth of 390 feet and levels established at 200 and 350 feet. The Hump Vein was developed by drifting for an average length of 335

OPERATIONS REPORT (continued)

feet on two levels and was diamond drilled to a vertical depth of 565 feet. This work indicated a modest tonnage good grade operation.

In 1962 Discovery mined the best section of the vein above the 350 foot level and in 1963 trucked by winter road and milled some 13,000 tons of gold ore averaging 1.14 ounces per ton. Grade was considerably higher than the uncut average of 0.86 ounces per ton indicated by previous mine sampling. This work was essentially a bulk test to determine the grade of ore and mining conditions.

Operating costs at the Camlaren Mine could be substantially reduced through the announcement in October 1965 of the Federal Government's massive road building program to cost \$10,000,000 annually for the next ten years in the Northwest Territories and Yukon. The

Ingraham Trail has been surveyed from the town of Yellowknife, north east to the Contwoyto Lake gold area via the Tundra Gold Mines' property. The first 22 miles of gravelled road is complete. An additional 35 miles of construction would bring the road close to the several gold properties in the Gordon Lake area (see map on cover). From that point an access road to the Camlaren Mine could provide direct year round truck transportation from Yellowknife, Edmonton and other outside supply points.

The extensive underground exploration program, including shaft sinking, planned for the Camlaren Mine in 1966 has been deferred and the agreement with Camlaren has been extended to 1968. We are anticipating improved transportation facilities to combat rapidly mounting operating costs, also an easement of the current very severe shortage of skilled labour.

RAYROCK MINES LIMITED

Rayrock Mines Limited, controlled by Discovery Mines through a 40 per cent direct equity interest, continues to expand its exploration/development interests and maintain gratifying financial growth. This Company's interests are well diversified in mining and oil production and in exploration.

For fiscal 1966, Rayrock anticipates a cash flow of \$250,000 from its petroleum division. Dividends from investments and interest income should amount to approximately \$125,000.

Market value of Rayrock's investments at the fiscal year end, October 31, 1965, amounted to \$3,291,900, more than double the cost or book value of \$1,574,146. Cash and short term notes amounted to \$845,352.

Rayrock's mineral exploration interests are far-ranging, with a number of projects under way on the Company's own behalf and in participation with others. Among the latter is Rayrock's 25 per cent interest in the Icon Syndicate which is now drilling a promising copper property in northwestern Quebec.

At the recent annual meeting of Rayrock, it was reported to shareholders that encouraging copper intersections are being obtained on the 140-claim property northeast of Chibougamau, Quebec. Drilling has so far intersected copper values in a flat lying quartz dolomite structure along an east west length of 1,000 feet. From geophysical indications, the structure could be quite extensive. An interesting factor is that

overburden and rock capping of the zone is only 40-60 feet thick which would suggest an open pit operation if sufficient tonnage is developed.

The Icon Syndicate has a second copper discovery lying some 28 miles to the southwest that will be diamond drilled later this year.

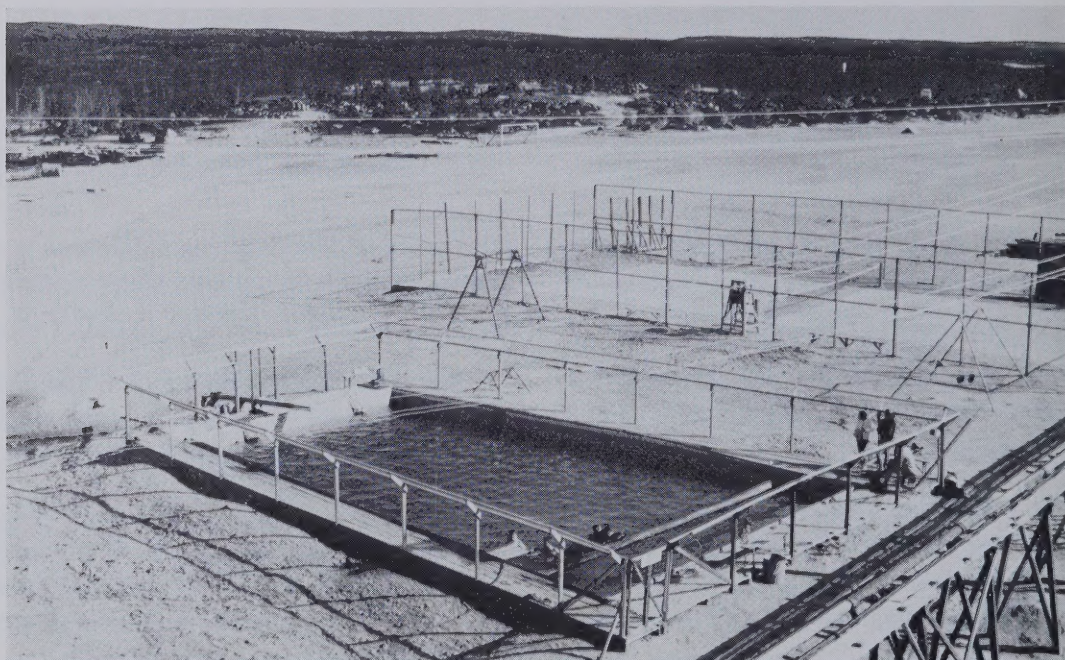
Rayrock is also partnered with Hydra Explorations Limited in an underground exploration program at the Velvet copper-gold mine in Rossland, B.C. Two diamond drills are now in operation at this property.

The Company plans to resume exploration this season on its Sulphur Bay claims, northwest of Pine Point Mines in the Northwest Territories. It is also undertaking a heavy exploration program this year in the Yukon, on claims held in association with Redstone Mines Limited and Fort Reliance Minerals Limited.

Through its oil division, Rayrock is now in the position of operator, having acquired all oil reserves held by its wholly-owned subsidiary, Elgin Petroleum Corporation.

In the 6-month period, April to October 1965, the division's oil sales averaged 344 barrels per day, compared to an average rate of 321 barrels per day for the 12-month period to October 31, 1965. It is expected the output trend will continue upward for at least the next four years. At the same time, operating costs are being reduced. Oil reserves are calculated to be sufficient for 20 years at the current rate of production.

DISCOVERY OUTDOOR RECREATIONAL FACILITIES

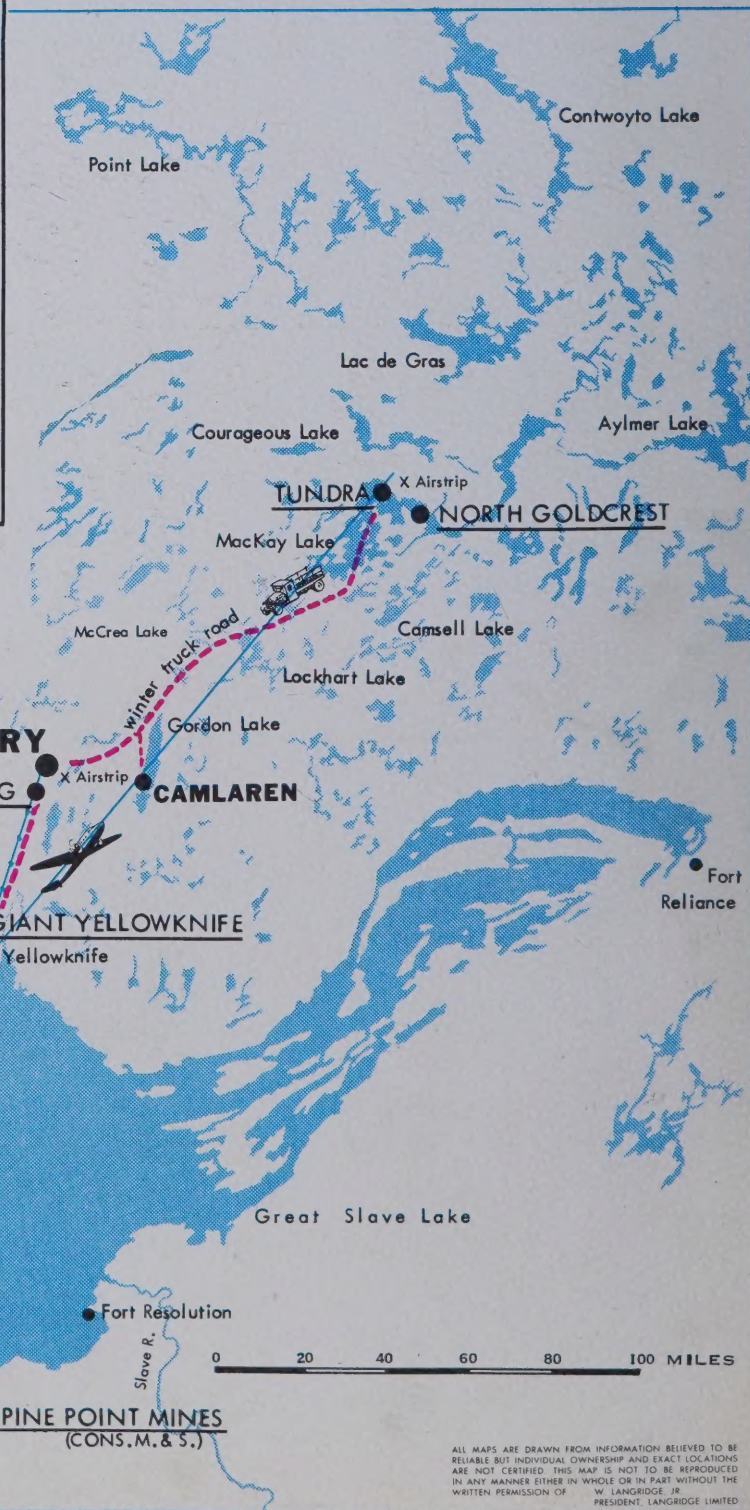


Swimming pool in the foreground, tennis courts nearby and in the background are the soccer and fastball playing fields.



The heated swimming pool is a popular spot, particularly for the women and children.

GOLD MINING IN CANADA'S FAR NORTH



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